

## January 2016 Climate Review for Puerto Rico and U.S. Virgin Islands.

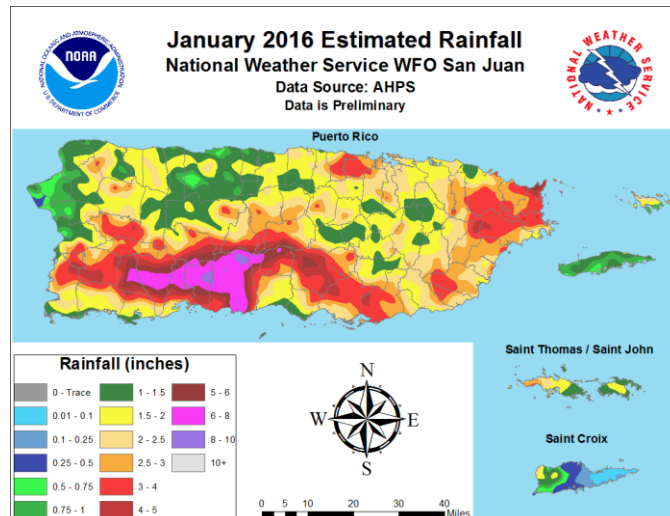
**Synopsis:** *Dry across north and east Puerto Rico but wet across southwest Puerto Rico. Dry across St Thomas/St John and St Croix. Warm temperatures prevailed across the area. Rainfall likely to be normal to above normal during Feb-Mar-Apr and May-Jun-Jul.*

### Summary

A seasonable weather pattern prevailed across the local islands during most of the month of January with showers embedded in the trade winds from time to time across the U.S. Virgin Islands and the East and North coastal areas of Puerto Rico (PR). Across the western half of PR, shower activity was observed from time to time.

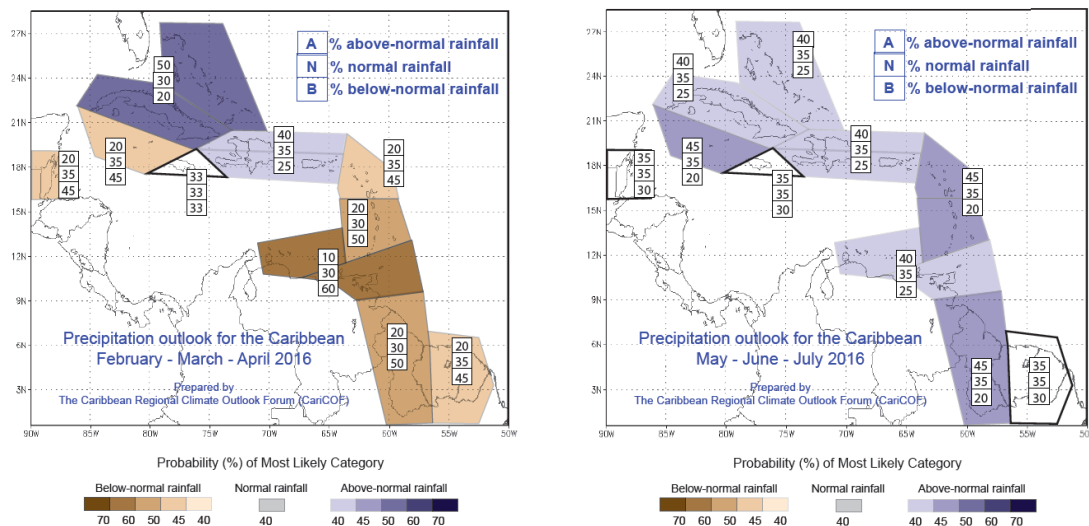
Based on the Cooperative Observer Network Data (COOP), a 68 % of the normal rainfall was observed across PR. Preliminarily, an average rainfall total of 2.26 inches was measured across PR, which is 1.07 inches below normal (Table 1). Across St. Thomas/St. John and St. Croix, an average rainfall total of 0.80 and 1.59 inches was observed, which is 1.92 and 0.41 below normal, respectively (Table 1). In terms of temperature, the mean temperature for PR was 75.1°F, which is approximately 1.7°F warmer than the 30-year average from the National Centers for Environmental Information (NCEI).

At the primary climatological data sites, a rainfall total of 0.50 and 1.63 inches was observed at Henry E. Rohlsen Airport in Saint Croix (TISX) and Cyril E King Airport in St Thomas (TIST); this is 1.64 and 0.75 inches below the normal rainfall. In terms of temperature, the mean temperature at TIST and TISX was 78.7 and 78.8°F, which is near normal at TIST, but 0.6°F above normal at TISX. Across the San Juan Area, January 2016 ended as the 9th driest and 5th warmest January on record in nearly 117 years of record.



January 2016 Rainfall Distribution based on AHPS. (Click on the image to enlarge)

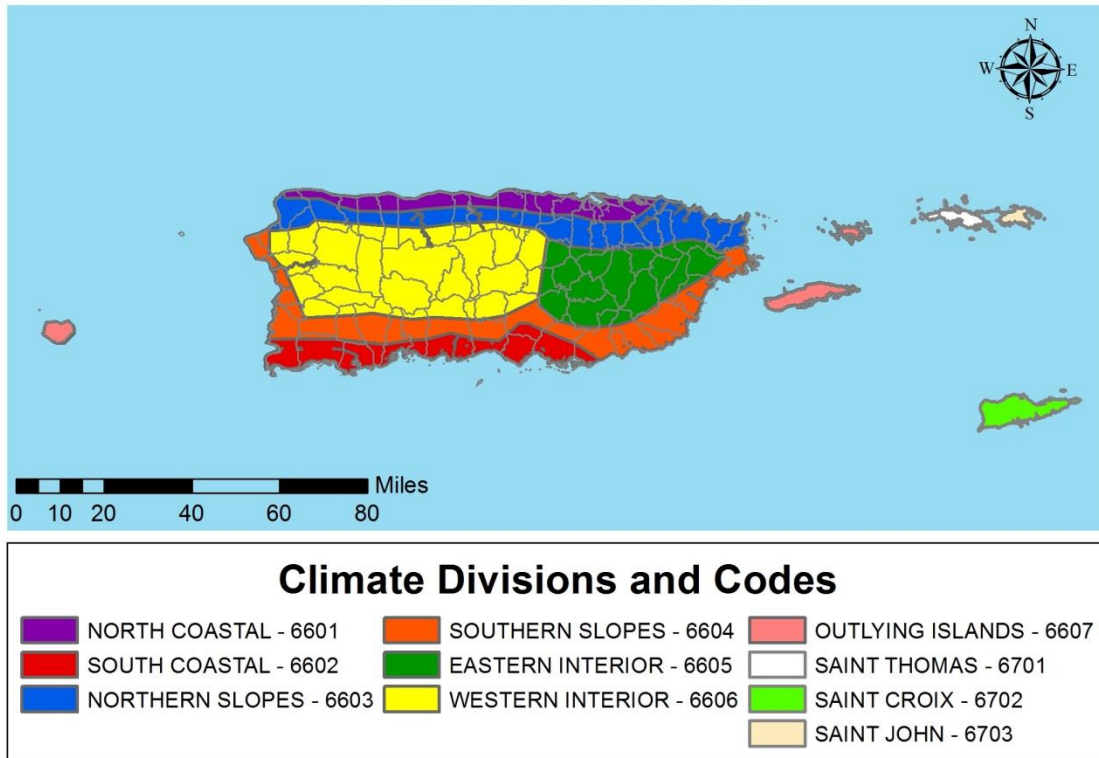
## Looking Ahead



Warm Sea Surface Temperatures (SSTs) North and East of the islands may lead to above-average air moisture during Feb-Mar-Apr and May-Jun-Jul. In fact, this pattern is expected to intensify during the months May-Jun-Jul. In addition, most models suggest a strong El Niño until spring 2016, quickly weakening with only 30-40 % El Niño probability for May-Jun-Jul. As a result, rainfall totals across local islands are expected to be normal to above normal during the next season. More Info: <http://rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/>

## Average Rainfall Accumulation per climate zones based on COOP

### Puerto Rico and U.S. Virgin Islands Climate Divisions



	North Coastal	South Coastal	Northern Slopes	Southern Slopes	Eastern Interior	Western Interior	All PR	St Thomas / St John	St Croix
<b>Observed</b>	1.65	0.99	2.02	3.77	3.75	1.59	2.26	0.80	1.59
<b>Normal</b>	4.06	1.62	4.20	2.00	4.69	3.41	3.33	2.72	2.00
<b>% PON per month</b>	<b>41</b>	<b>61</b>	<b>48</b>	<b>189</b>	<b>80</b>	<b>47</b>	<b>68</b>	<b>29</b>	<b>80</b>
<b>Accumulated</b>	1.65	0.99	2.02	3.77	3.75	1.59	2.26	0.80	1.59
<b>Normal accumulation</b>	4.06	1.62	4.20	2.00	4.69	3.41	3.33	2.72	2.00
<b>% PON accumulated</b>	<b>41</b>	<b>61</b>	<b>48</b>	<b>189</b>	<b>80</b>	<b>47</b>	<b>68</b>	<b>29</b>	<b>80</b>

Table 1. 2016 Rainfall Totals (inches) and Percent of Normal (PON).

## Historical Rainfall and Temperature

	Puerto Rico		San Juan Area		IST		ISX	
1	1983	1.30"	1978	0.61"	2013	0.48"	2011	0.49"
2	1985	1.30"	1983	0.69"	2016	0.50"	1977	0.54"
3	1976	1.51"	1960	0.94"	2007	0.76"	2009	0.60"

Table 2. Driest Januarys

	Puerto Rico		San Juan Area		IST		ISX	
1	1992	7.70"	1937	15.47"	2006	4.83"	1963	7.35"
2	2005	6.51"	1902	12.45"	1995	4.6"	2005	5.26"
3	1997	6.29"	2010	11.07"	1956	4.19"	1952	4.77"

Table 3. Wettest Januarys

	Puerto Rico**		San Juan Area		IST		ISX	
1	1948	75.6°F	2014	80.2°F	1994	80.8°F	1973	80.6°F
2	2007	75.0°F	1981	79.8°F	1995	80.2°F	1994	80.0°F
3	2002	74.8°F	2015	78.9°F	1993	80.1°F	1999	79.7°F

Table 4. Warmest Januarys

	Puerto Rico**		San Juan Area		IST		ISX	
1	1941	66.2°F	1950	73.3°F	1955	75.0°F	2012	73.4°F
2	1943	70.6°F	1917	73.4°F	2012	75.5°F	1979	75.2°F
3	2000	71.2°F	1907	73.4°F	1956	76.0°F	1955	75.5°F

Table 5. Coolest Januarys

**\*\*The following years are not included -do not meet WMO criteria % of missing days, 40, 56, 57, 58, 59, 60, 67, 69, 73, 74.**

	Puerto Rico	San Juan Area	IST	ISX
Temperature	73.4 °F	77.6 °F	78.8 °F	78.2 °F
Rainfall	3.41"	3.76"	2.38"	2.14"

Table 6. Normal Values for January

## Monthly and Seasonal Highlights for Primary Climatological Data Sites.

	Dec (2015)	Jan	Feb	Season (data till 2/05/2016)
San Juan Area	5 <sup>th</sup> warmest (80.0 °F)	5 <sup>th</sup> warmest (78.7 °F) and 9 <sup>th</sup> driest (1.60")	---	5 <sup>th</sup> warmest (79.1 °F) and 2 <sup>nd</sup> driest (5.22")
IST	7 <sup>th</sup> warmest (80.2 °F)	---	---	---
ISX	4 <sup>th</sup> warmest (80.3 °F)	8 <sup>th</sup> warmest (78.8 °F) and 2 <sup>nd</sup> driest (0.50")	---	5 <sup>th</sup> warmest (78.8 °F) and 3 <sup>rd</sup> driest (2.96")

Table 7. Winter 2015-2016

## Additional Highlights Based on COOP Data

### Wettest Days

Station	Inches (inches)	Date
CORRAL VIEJO	2.82	1/25/2016
JAJOME ALTO	2.10	1/9/2016
SABANA GRANDE 2 ENE	1.62	1/10/2016

### Highest Maximum Temperatures

Station	Temperature (°F)	Date
PONCE 4 E	95	1/12/2016
LAJAS SUBSTATION	90	1/4/2016
AGUIRRE	89	1/13/2016

### Lowest Minimum Temperatures

Station	Temperature (°F)	Date
MARICAO 2 SSW	60	1/15/2016
DOS BOCAS	60	1/24/2016
AIBONITO	61	1/29/2016

Data is preliminary and has not undergone final quality control by the National Centers for Environmental Information / NCEI/. Therefore, this data is subject to revision. Report based on data received until February 5<sup>th</sup> 2016.

*Puerto Rico Climate Record Period: 1940 to 2016*

*San Juan Metro Area Climate Record Period: 1898 to 2016 (Primary climatological site)*

*Cyril E. King Airport/St Thomas Climate Record Period: 1953 to 2016 (Primary climatological site)*

*Henry E. Rohlsen Airport/St Croix Climate Record Period: 1951 to 2016 (Primary climatological site)*